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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of:	)	
	)	
Implementation of Section 17	)	ET Docket 93-7
of the Cable Televsion	)	
Consumer Protection and	)	
Comptetion Act of 1992	)	
	)	
Compatibility Between	)	
Cable Systems and Consumer	)	
Electronics Equipment	)	

REPLY COMMENTS OF THE COMMUNITY ANTENNA TELEVISION ASSOCIATION, INC.

Community Antenna Television
Association, Inc.
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April 21, 1993

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Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992	)	ET Docket 93-7
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Compatibility Between Cable Systems and Consumer Electronics Equipment	)	

REPLY COMMENTS OF THE COMMUNITY ANTENNA TELEVISION ASSOCIATION, INC.

1. The Community Antenna Television Association, Inc., (CATA), hereby files reply comments in the above-captioned proceeding. CATA is a trade association representing owners and operators of cable television systems serving approximately 80 percent of the nation's more than 60 million cable television subscribers. CATA files these reply comments on behalf of its members who will be directly affected by the Commission's action.

INTRODUCTION

2. By its Inquiry in this proceeding, the Commission has compiled a record that is complete in its treatment of the many questions asked, and unique in the unanimity of the answers provided. All the options have been defined. Relative costs are

known. There is little, if any, dispute about present technology and its capabilities, and a shared concern for how to deal with future technology. The Commission Inquiry has been so successful thus far that we believe it is now possible for the Commission to simplify the issues and define more particularly the focus of the proceeding.

3. Compatibility between cable systems and television receivers is a matter of technology. The approaches the Commission may take to respond to Congressional concern are bounded by the art of the technologically possible. Given what is possible, the Commission is constrained by what is practical - the ultimate cost to the consumer of whatever choices are made. With a recognition of these factors, one is inevitably drawn to a range, a narrow range, of solutions. CATA has reviewed the record in this proceeding and believes that the Commission is now

channels places the decoder in a converter box which feeds receivers on only one channel.

5. Receiver Improvement. As the Commission is aware, both the cable and consumer electronics industries are attempting to reach an accord with respect to these matters. The comments in this proceeding indicate the willingness of most television manufacturers to improve tuners as part of an overall approach to solving the compatibility problem. Although CATA will not attempt to predict the details of such an accord, the essential factor must be that tuners must be adequate to the task. The technical parameters defining good tuner design are known. Hopefully, one element of any body of Commission regulation emerging from this proceeding will address performance standards for tuners.

6. Adequate Tuning Range. As the cable industry has increased the number of channels it offers, television manufacturers have rushed to keep up. Since the manufacturers are in the response mode, there are always some cable systems whose channel capacity exceeds the tuning range of most cable-ready receivers. It is most difficult to know what to do about this situation. Surely, it would be poor public policy to place artificial limits on the range of spectrum at the disposal of cable systems. Cable is, after all, a closed transmission medium. Thus, it does not use spectrum at the expense of any

other communications service. There is no philosophy of spectrum management that might be invoked to regulate the amount of spectrum used by a cable system. It is inevitable that cable, with the incentive to offer more services will expand its spectrum use before television manufacturers expand tuning range. Indeed, the manufacturer has to wait and make a judgment about when enough cable systems have expanded their capacity to make it worthwhile to offer receivers with similarly expanded capacity. CATA maintains that if television manufacturers are unwilling to design receivers with modular tuners (enabling replacement with new tuners in the future) then their only recourse is to work more closely with the cable industry in order to forecast channel expansion trends with more certainty.

7. Scrambling. Cable operators must have the ability to control who receives individual cable services. As the Commission has learned, for many systems with limited per-channel and no pay-per-view offerings, traps have been reasonably effective and are compatible with receivers and VCRs. However, an increasing number of systems, offering a broader range of premium services, must scramble signals. And for most of these systems, the only viable path to scrambling lies through the set-top converter. In its comments, the Electronic Industries Association cites with approval the statement of Senator Leahy that the main reason for converter boxes is so cable systems can charge for them. The logic of this curious hypothesis is that

with no incentive for profit, cable systems would not use converters. If EIA and Senator Leahy are right, then the new cable rules which permit charging no more than cost for

9. Control of Descrambling. It is apparent that some manufacturers recognize the inadequacy of clear-channel solutions to the compatibility problem. They suggest as a future solution a "national renewable security standard" that would permit some or all of the descrambling function to take place in the television receiver. This is simply not a viable approach. The ability to control the provision of services is essential to the business of cable television. Now it is possible for each operator to make a business judgment weighing the expense of scrambling techniques against the amount of signal piracy that

television receivers and VCRs. Possibilities range from relatively low-cost RF by-pass converters to more expensive converters with dual tuners and descramblers. In some cases, depending on the degree to which an individual subscriber feels affected by incompatibility, a simple re-wiring of the cable

the cable operator in control of descrambling. These receivers will solve the compatibility problem. Most of the cable commenters support the EIA/ANSI 563 decoder interface connector ("multi-port") because it is a proven standard that works. Most, but not all, television manufacturers oppose this approach because 1) it is thought to be too expensive and, 2) there is concern that receivers so equipped would soon be rendered obsolete by approaching digital compression technology. These manufacturers argue that we should move directly to adopting digital standards for both cable systems and receivers.

12. Receivers with circuitry akin to decoder interface circuitry are sold all over the world - by the same manufacturers who suggest the cost is too high, indeed, by the same manufacturers who seem not to mind the cost of installing decoding circuitry that would move all or part of the decoding function to the receiver. In fact, whether the increased cost of such a receiver is $5 or $10 or even $20, this cost represents the least expensive solution to the compatibility problem for the consumer. If a subscriber is forced to pay an increased cost for a more sophisticated converter or interdiction technology (assuming it could be employed widely), these costs will be demonstrably more than for a receiver equipped with a decoder interface port. Moreover, any increased receiver cost should not be a competitive issue. If <u>all</u> receivers designated "cable-ready" have to be equipped with a decoder interface port, then

all manufacturers will be on an even footing.

13. The fear that the death of analogue cable transmission will prematurely doom a generation of receivers equipped with decoder interface circuitry is unjustified. It may well be that digital compression will become the method of choice for most cable transmission systems. We certainly don't know this now. A few cable systems are just taking the first steps in the design and deployment of digital compression technology. Others are opting instead for an even larger use of the spectrum. The two approaches are not mutually exclusive. No one knows if either approach will prove commercially successful. But what we can say with some certainty is that nothing is going to happen overnight. Even assuming the ultimate success of digital compression, analogue cable systems, like NTSC television, will be around for a long time. To imagine that the advent of new technologies will render useless an entire generation of television receivers is unrealistic. Millions of cable subscribers will be able to benefit from decoder interface equipped receivers. The market - if that's the concern of the manufacturers - will remain huge.

14. The Commission's Obligation. Congress has required that the Commission provide it with a report on the means of "assuring" compatibility between television receivers, VCRs and cable television systems. It has also required that consideration of the compatibility issue take into account the

necessity of protecting cable signals against theft and the cost to consumers of any scheme to achieve compatibility. Recognizing the difficulties of achieving complete compatibility, Congress has stated that compatibility regulations might include giving subscribers the option of having non-scrambled signals delivered to subscribers without passing through converter boxes. Further, where reception "requires" a converter box, subscribers are to be told of the resulting limitations on the use of their receiving equipment. It appears, therefore, that the Commission has been given great freedom to analyze the problem and, to the extent possible, adopt regulations "assuring" compatibility. The record as assembled to this point is sufficiently complete to enable the following observations: While much can be done to greatly improve compatibility between the imbedded base of "cable ready" receivers and cable systems, by the use of by-pass converters and the like, nothing can be done to completely eliminate the problem. Existing receivers cannot be "re-tooled" and cable systems cannot be expected to re-build. As for new cable systems, there is no technological panacea that will be appropriate for all, or even most. For the immediate future the best and least expensive approach to achieving compatibility is to require cable-ready receivers to be equipped with decoder interface ports and to require cable systems to supply appropriate decoders to subscribers who have purchased these receivers. Experiments with digital compression should be monitored. At some point, when enough is known, the Commission

should be prepared to adopt whatever standard emerges. These fundamental observations should form the core of the Commission's report to the Congress. Any other approach is simply not supported by the record.

15. Both the cable and consumer electronics industries have a great incentive to resolve the compatibility problem. As the Commission is aware, efforts continue to be made and there is reason to believe these efforts will bear fruit. Until then, CATA and others in the cable industry are prepared to supply whatever further information the Commission may deem helpful.

Respectfully submitted,

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